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(54) LIGHTED DETAIL BRUSH

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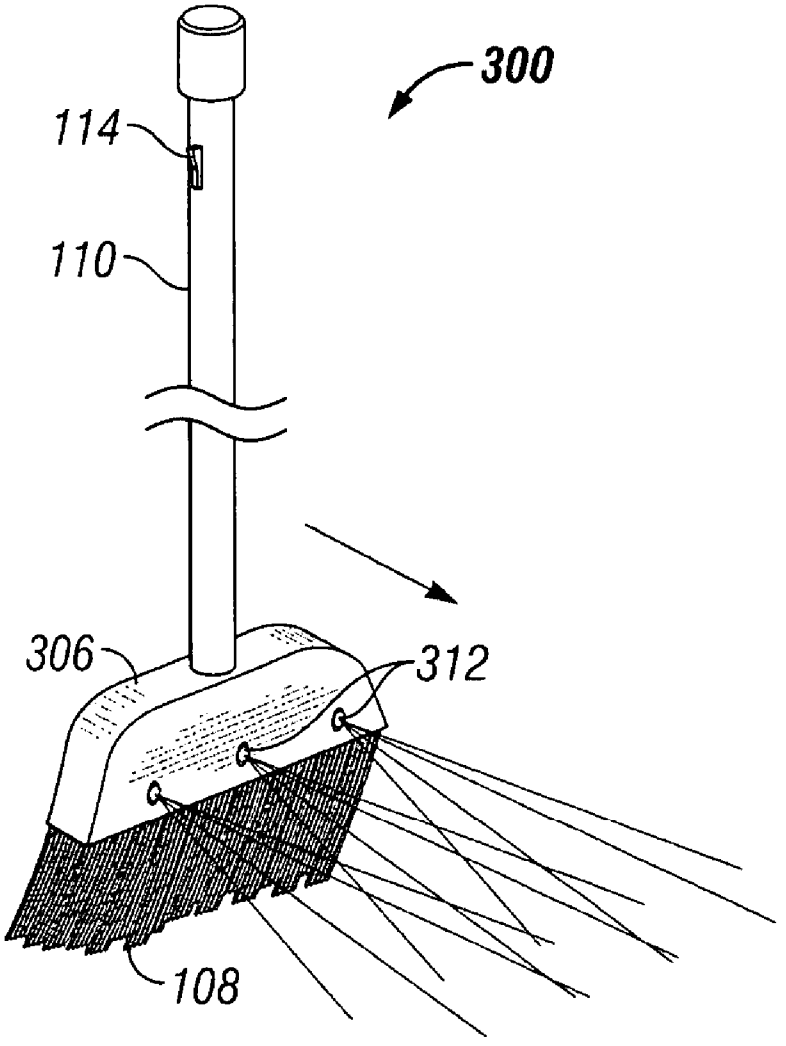
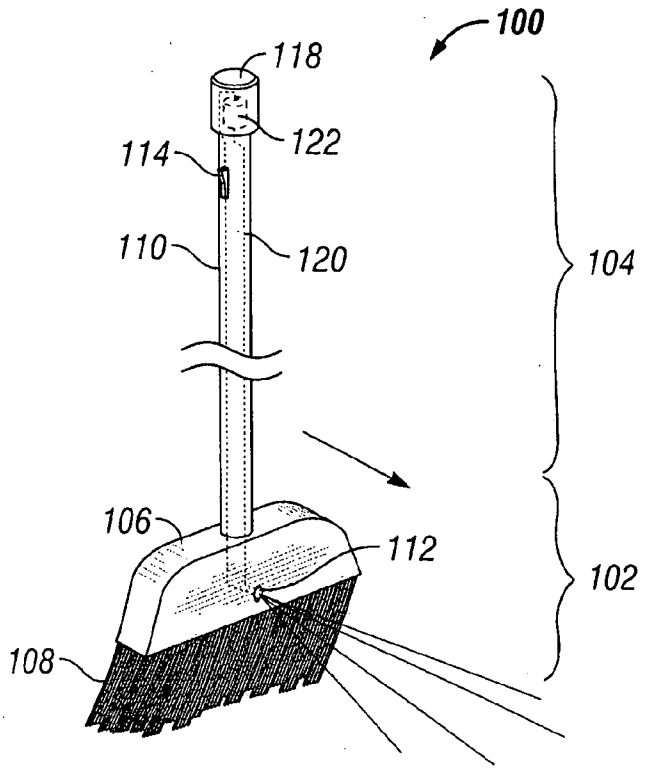
(52) **U.S. Cl.** **362/91**; 362/109

(57) **ABSTRACT**

A handheld implement, such as, for example, a brush, detailer, applicator, or the like, includes a housing and a work element connected to the handle. The implement also includes a light, a power source connected to the light, and a switch for turning on and off the power source for illuminating the light. The work element is concealable in the housing when the implement is not in use, and can be extendable from the housing when the implement is in use. The light, via switching the light on or off, selectively illuminates a surface on which the work element of the implement is employed or operates. The work element is, for example, bristles, and the light is a low power bulb or LED.




100
118
122
114
110
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104
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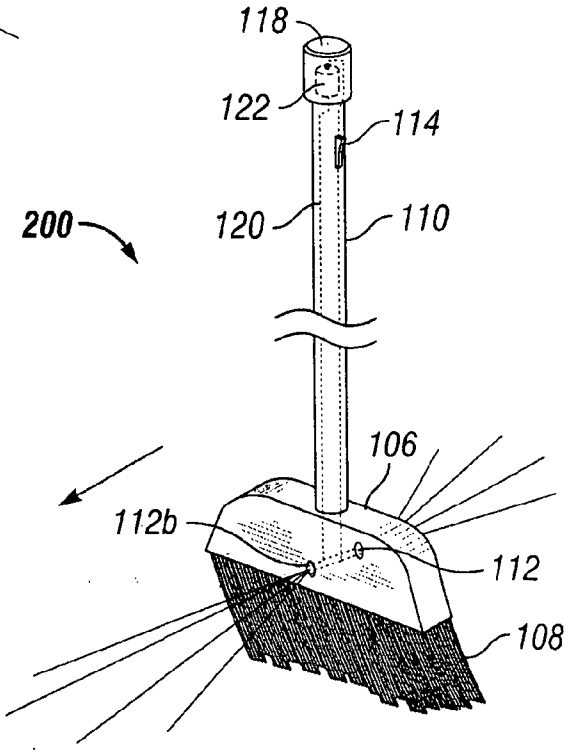
102
108

FIG. 1


118
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200
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112b
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108

FIG. 2A

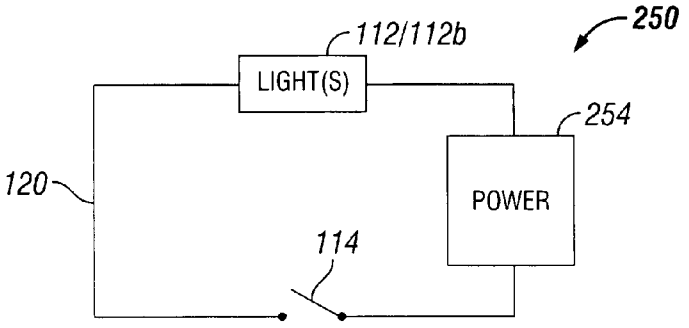

FIG. 2B

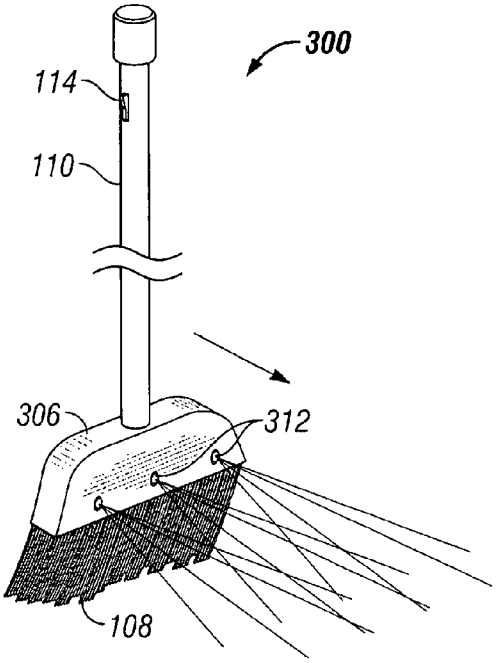

FIG. 3

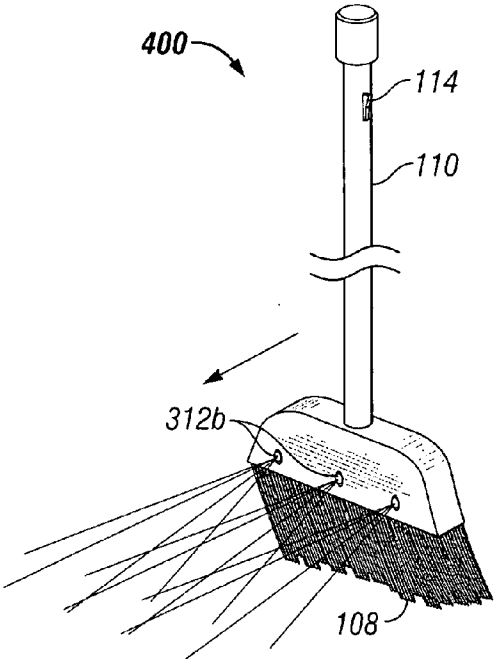

FIG. 4

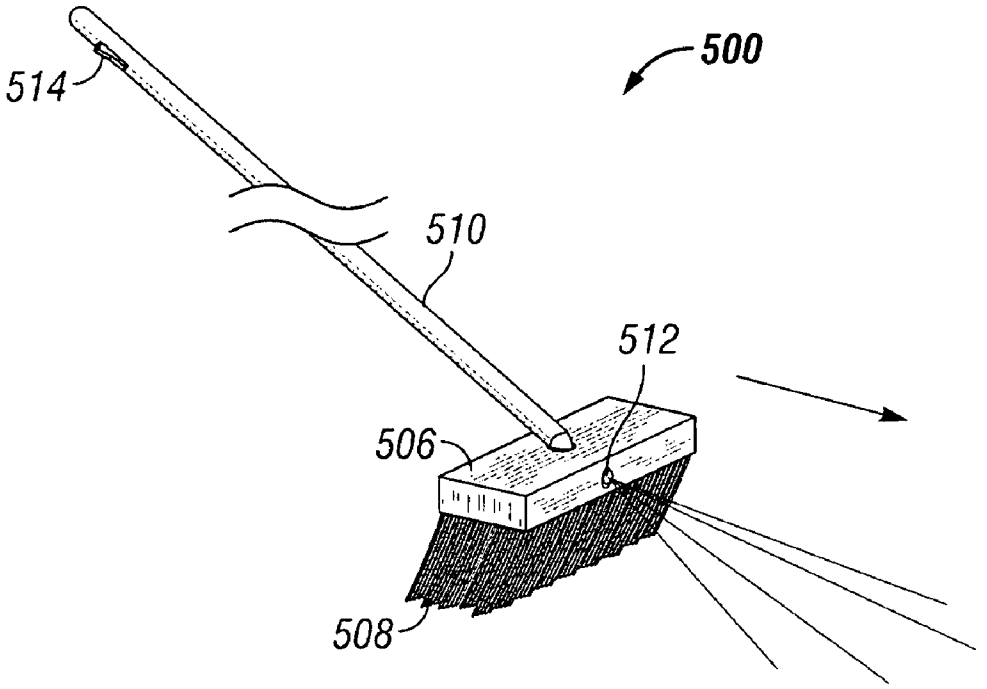

FIG. 5

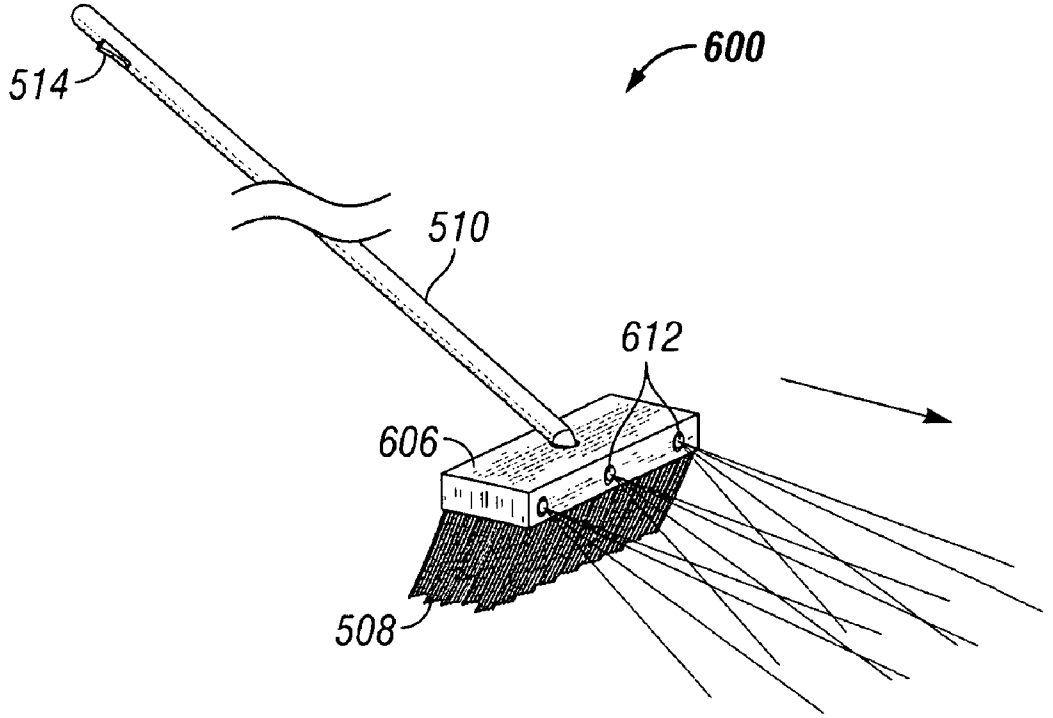

FIG. 6

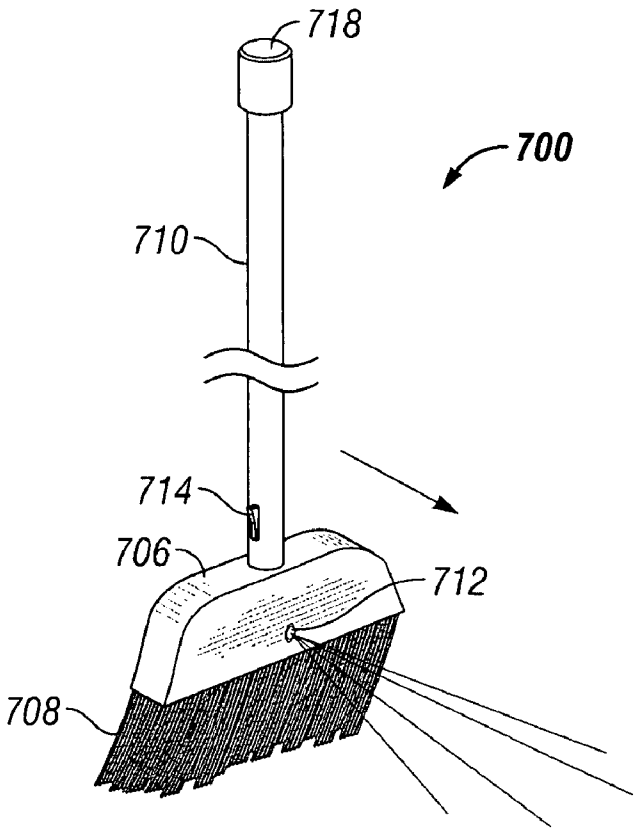

FIG. 7

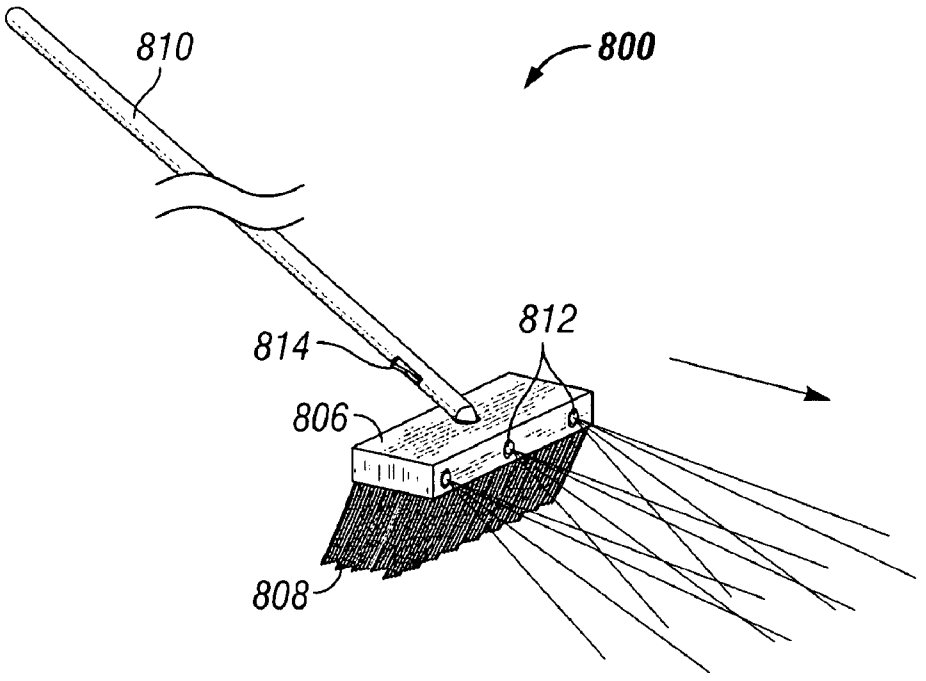

FIG. 8

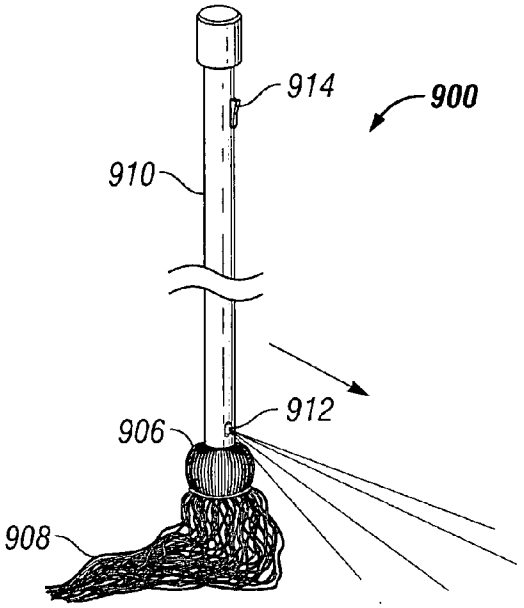

FIG. 9

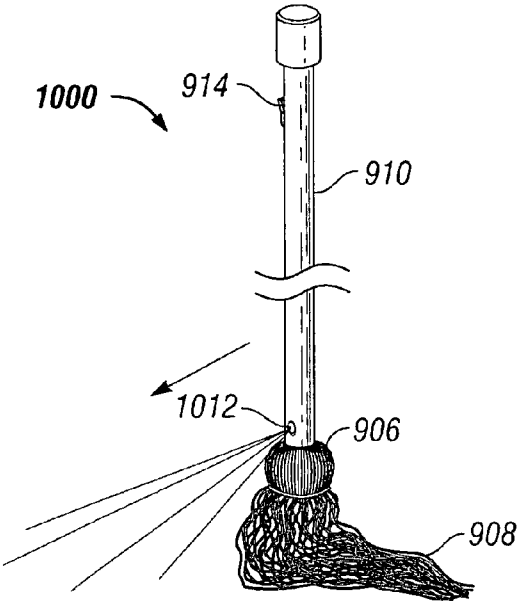

FIG. 10

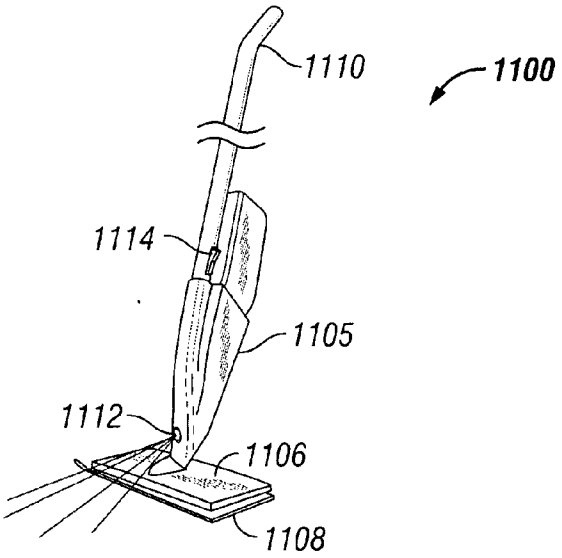

FIG. 11

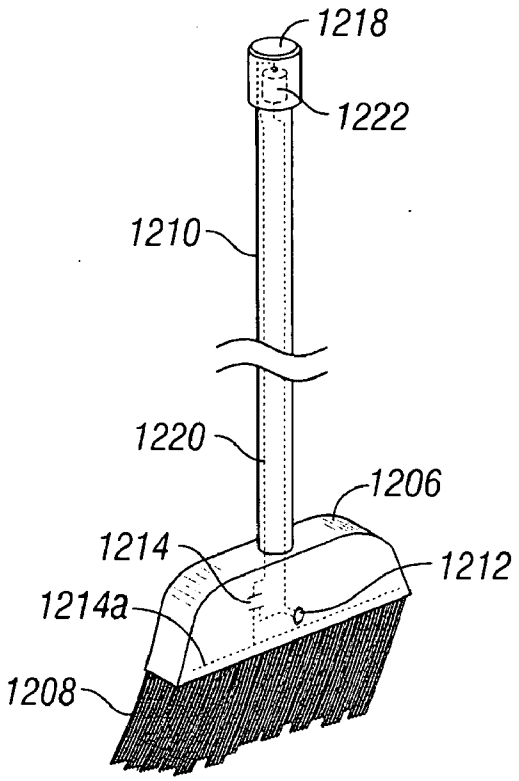

FIG. 12A

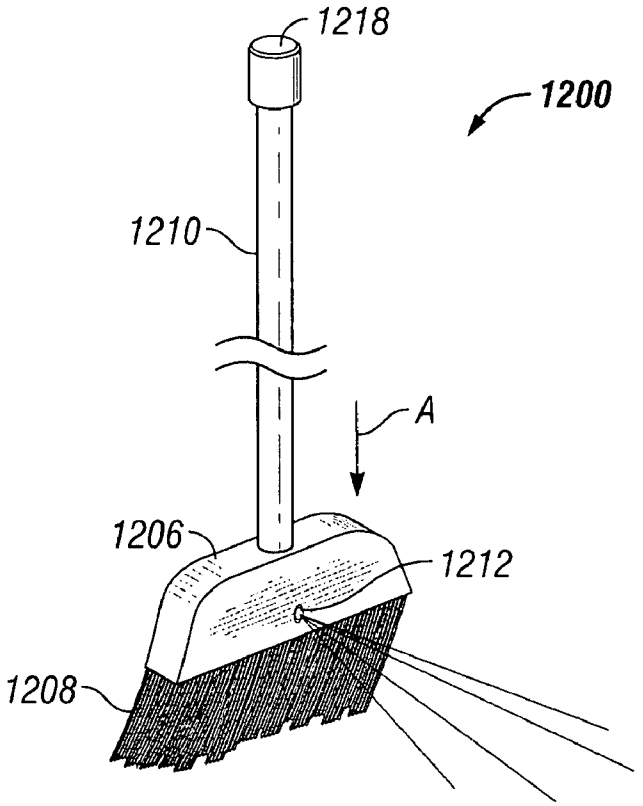

FIG. 12B

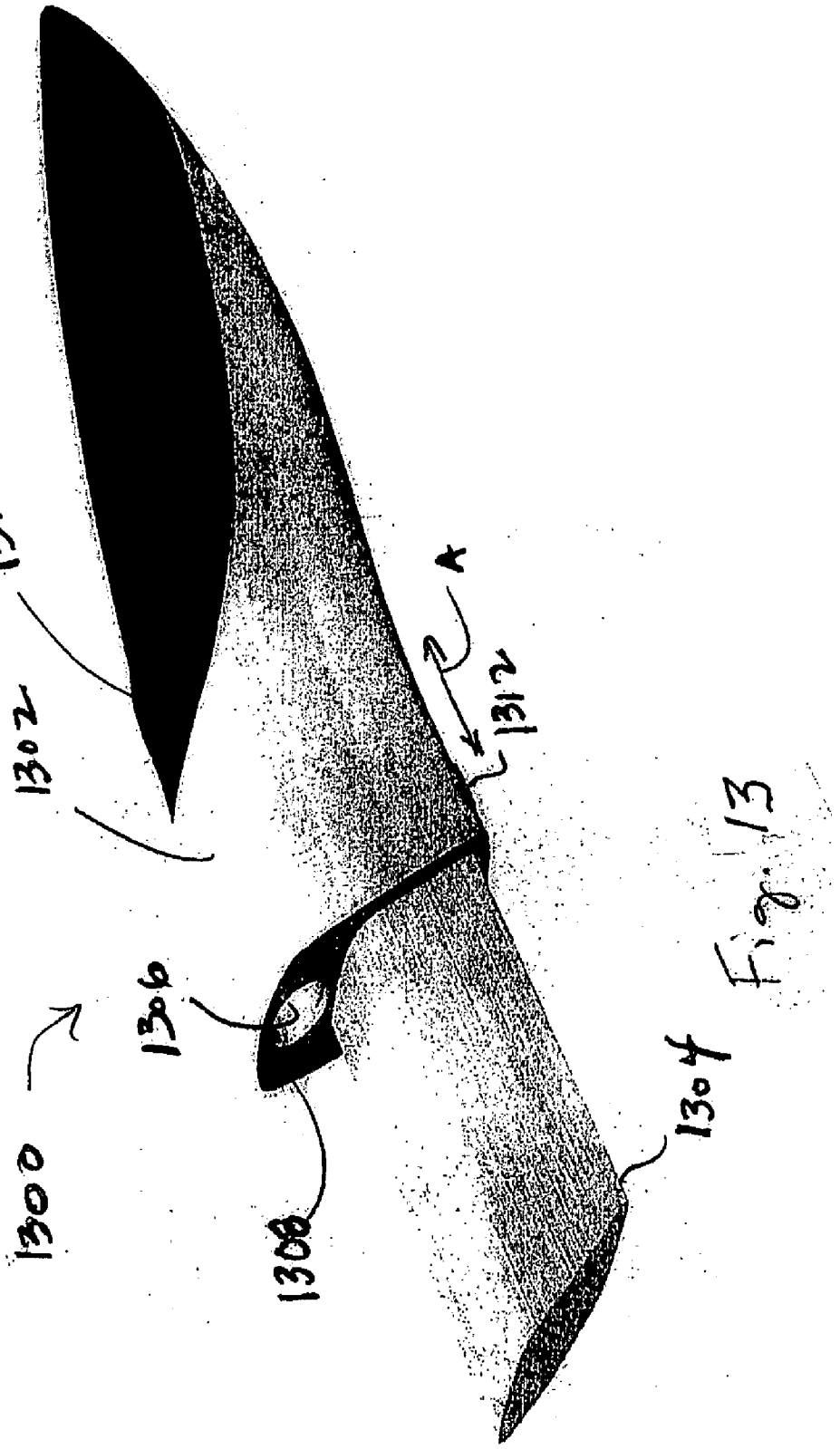

Fig. 13

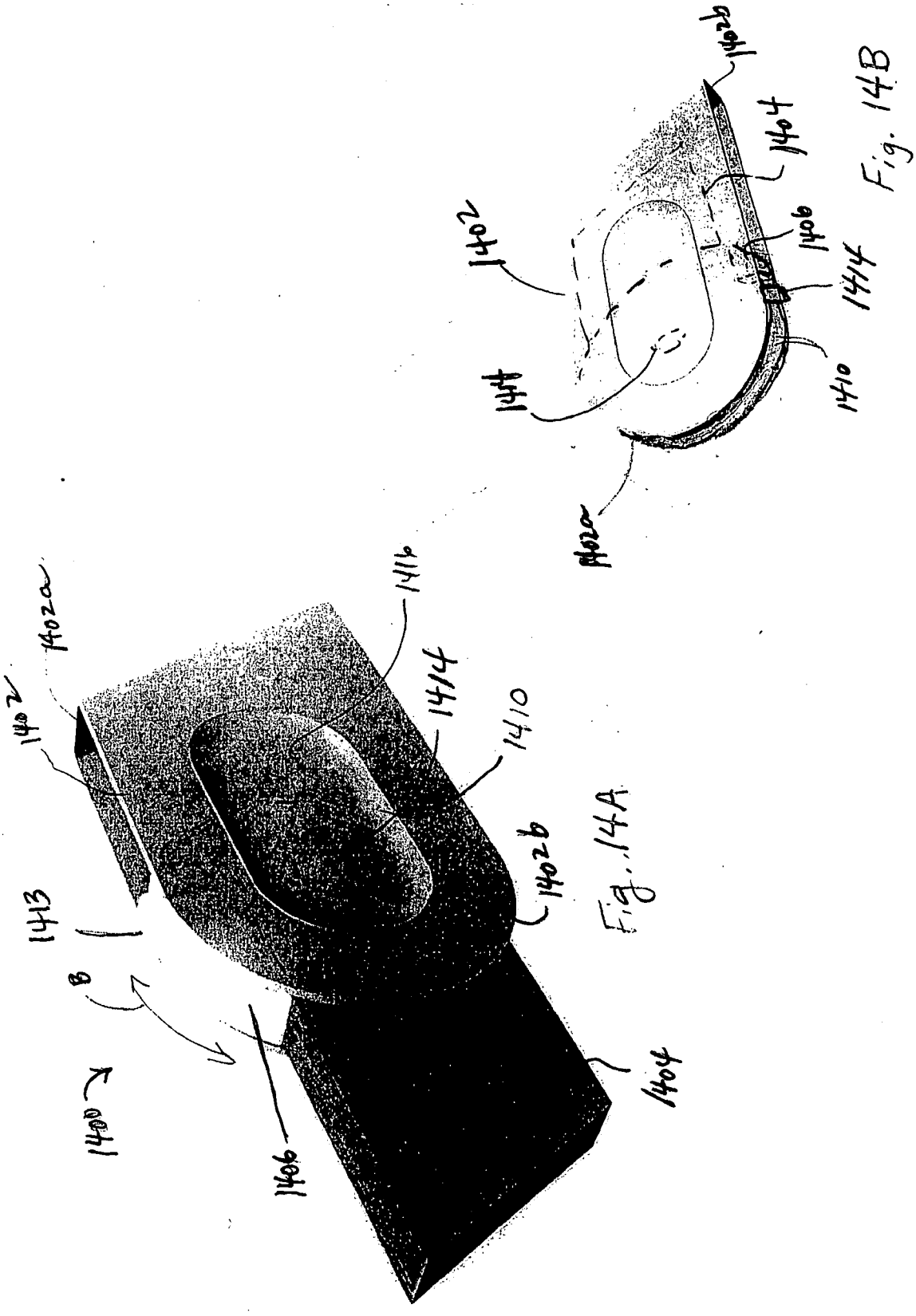

Fig. 14A

Fig. 14B

LIGHTED DETAIL BRUSH

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation-in-part of U.S. patent application Ser. No. 11/088,294, filed on Mar. 24, 2005, titled "Lighted Cleaning Implement", incorporated herein by this reference.

BACKGROUND OF THE INVENTION

[0002] The present invention generally relates to cleaning implements, such as brooms, mops, whisk brooms, coating applicators, dusters, and brushes and, more particularly, relates to illuminating features incorporated in handheld detail brushes and other implements.

[0003] Brushes, brooms, mops, dusters, whisk brooms, and the like are conventionally quite standard, basic, and featureless. Improvements to these conventional implements have typically been limited to varied materials, for example, horsehair, natural straw bristles, cotton, or similar materials as bristles and brush surfaces, mop heads, cleaning surfaces, paint applicators, and wood handles, have been replaced with plastics or other synthetics in certain instances. Notwithstanding these limited improvements, the conventional designs for these implements have remained generally unchanged for many years.

[0004] A reason that these conventional designs have remained unchanged is that consumers desire these implements to be fairly inexpensive and primarily functional. In order to limit costs, manufacturers have maintained basic designs, without any significant improvements or new features. Presently, costs for simple electronics have dropped substantially, and requirements to power such electronics have been vastly reduced and miniaturized. For instance, light bulbs, batteries, and circuits have become quite inexpensive to make and maintain. Also, power consumption required for bulbs and circuits, particularly with newer light emitting diodes (LEDs) and similar low-energy lighting components, has been reduced.

[0005] It would, therefore, be a significant improvement in the art and technology to improve brush, bristled, and cleaning implements, such as brushes, applicators, brooms, mops, dusters, paint or coating applicators, whisk brooms, and similar devices, to provide lights or illumination sources to the devices. The lights can illuminate an area for service, such as a draftsman's drawing paper/board, a written page, structural crevices, corners, features, under areas, such as a bed, car dashboard, and the like, inside cabinets, in car or transportation cabins or compartments, and otherwise. The present invention provides numerous advantages and improvements, including improvements and nuances in the foregoing respects.

SUMMARY OF THE INVENTION

[0006] An embodiment of the invention is a system for cleaning. The system includes a cleaning element and light connected to the cleaning element.

[0007] Another embodiment of the invention is a broom having a handle and bristles connected to the head. The broom includes a light in the handle, a power source connected to the light, and a switch for turning on and off the power source.

[0008] Yet another embodiment of the invention is a mop having a handle and a mop head connected to the handle. The mop includes a light in the handle, a power source connected to the light, and a switch for turning on and off the power source.

[0009] Another embodiment of the invention is an implement comprising a handle and a cleaning feature connected to the handle. A light is connected to the implement.

[0010] Yet another embodiment of the invention is a method of using an implement. The method includes connecting a light to the implement.

[0011] Another embodiment of the invention is a method of using an implement. The method includes illuminating by the implement.

[0012] A further embodiment of the invention is a system for brushing. The system includes a bristle, a housing containing the bristle, the housing being hand holdable, and a light connected to the housing.

[0013] Another embodiment of the invention is a hand implement for work on a surface. The hand implement includes an elongate housing having an operational end, a work element connected to the operational end, a light connected to the housing for selectively illuminating the surface, a power source contained within the housing and connected to the light, and a switch connected to the power source for turning on and off the power source to the light.

[0014] Yet another embodiment of the invention is a hand implement for work on a surface. The implement includes parallel sides joined by an end, a wheel rotatably connected between the parallel sides, a work element connected to the periphery of the wheel, a light connected to the wheel for selectively illuminating the surface, a power source connected to the light and contained within the wheel, and a switch connected to the power source for turning on and off the power source to the light.

[0015] Another embodiment of the invention is a method of using a hand implement. The method includes connecting a light to a housing, connecting a bristle to the housing, and selectively switching on/off the light.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] The present invention is illustrated by way of example and not limitation in the accompanying figures, in which like references indicate similar elements, and in which:

[0017] **FIG. 1** illustrates a side perspective view of a system for cleaning, incorporating a light, according to certain embodiments of the invention;

[0018] **FIG. 2A** illustrates an alternate side perspective view of a system for cleaning, such as that of **FIG. 1**, incorporating another light, and showing, according to certain embodiments of the invention;

[0019] **FIG. 2B** illustrates a circuit for powering and switching "on" and "off" a light, for example, the lights of the systems of the other Figures herein, according to certain embodiments of the invention

[0020] **FIG. 3** illustrates a side perspective view of a system for cleaning, incorporating a plurality of lights on the side, according to certain embodiments of the invention;

[0021] **FIG. 4** illustrates an alternative side perspective view of a system for cleaning, such as that of **FIG. 1**, incorporating another plurality of lights, according to certain embodiments of the invention;

[0022] **FIG. 5** illustrates a side perspective view of an alternative system for cleaning, incorporating a light, according to certain embodiments of the invention;

[0023] **FIG. 6** illustrates a side perspective view of another alternative system for cleaning, incorporating a plurality of lights, according to certain embodiments of the invention;

[0024] **FIG. 7** illustrates a side perspective view of yet another system for cleaning, incorporating a light and variable positioning of a switch for operating the light, according to certain embodiments of the invention;

[0025] **FIG. 8** illustrates a side perspective view of an alternative system for cleaning, such as that of **FIG. 7**, incorporating a plurality of lights, according to certain embodiments of the invention;

[0026] **FIG. 9** illustrates a side perspective view of a system for cleaning, incorporating a light, according to certain embodiments of the invention; and

[0027] **FIG. 10** illustrates another side perspective view of system for cleaning, such as that of **FIG. 9**, incorporating another light, according to certain embodiments of the invention;

[0028] **FIG. 11** illustrates a side perspective view of an alternative system for cleaning, incorporating a light, according to certain embodiments of the invention;

[0029] **FIG. 12A** illustrates a side perspective view of a system for cleaning, incorporating a light in "off" mode and an alternative switch from that of other embodiments and

[0030] **FIG. 12B** illustrates the system for cleaning of **FIG. 12B**, incorporating the light in "on" mode and showing activation of the alternative switch by an event, such as movement of the system on a surface, according to certain embodiments of the invention;

[0031] **FIG. 13** illustrates a system for sweeping and detailing, incorporating a light and bristles in a handheld pen-shaped body, according to certain embodiments of the invention;

[0032] **FIG. 14A** illustrates another system for sweeping and detailing, incorporating a light and bristles, within a swiveling closure shown in "open" position as when the bristles and light are employed, according to certain embodiments of the invention; and

[0033] **FIG. 14B** illustrates the system of **FIG. 14A**, in closed position with the bristles and light not in use, according to certain embodiments of the invention.

DETAILED DESCRIPTION

[0034] Referring to **FIG. 1**, a cleaning implement **100** comprises a cleaning head **102** connected to a handle **104**. The head **102** comprises a shroud **106** connected to an element **108** for cleaning, for example, broom bristles, mop strings, or duster cloth, or the like. The handle **104** comprises an extension **110** for a human user's manual hand gripping. The extension **110** connects to the shroud **106**. The implement **100** incorporates therein and connected therewith a light **112**. A switch **114** is connected to and incorporated with the implement **100**, such as in the handle **104** or in the head **102**. The switch **114** is electrically connected to the light **112** via a powered circuit **120** (shown in phantom in **FIG. 1**) supplied by a battery **122** (shown in phantom) or other power source for powering the light **102**.

[0035] In certain embodiments, the shroud **106** is a hood or clamp for retaining the element **108**, and is comprised of plastic, wood, metal, or other substantially rigid material(s). The shroud **106** is formed with an opening from within the shroud **106** to outside the shroud **106**, to accommodate and retain the light **112** pointing in a direction sufficient to illuminate an area of a surface to be cleaned (to be understood as located beyond the latter end of the implement **100** towards the bottom of **FIG. 1**). The light **112** is either rigidly retained in the shroud **106** in the applicable pointing direction; or, alternatively, a fixture of the light **112** retained in the shroud **106** allows manual pointing of the light **112** as the application requires.

[0036] The element **108** is a plurality of broom bristles, mop strings, or dust cloths, comprised of natural or synthetic materials, retained by the shroud **106** to expose the element **108** to the surface to be cleaned. The handle **104** is a metal or plastic cylinder or other hand grip suitable for handling by the human user via the user's hand(s), and can include ergonomic or usability features, such as an end cap **118** to prevent scratching and other features. The end cap **118** also serves to retain a battery **120** (shown in phantom) for powering the light **112**. The end cap **118** is internally threaded to mate with an outward thread of an upper end (in **FIG. 1**) of the extension **110**.

[0037] Within the cylinder of the handle **104** and extending through the handle **104** to within the shroud **106**, an electrical connector or other power conducting wire or cable interconnects the switch **114**, the battery **122**, and the light **112**, and completes the circuit back to the switch **114**. The light **110** is one or more of a filament bulb, light emitting diode (LED), or other illuminator(s). Additionally, the implement **100** can include, incorporated and connected therewith, an external power source (not shown in **FIG. 1**) for powering the light, if and as required or applicable. The light **112** is, alternately, a fluorescent or other radiating element and does not require any added power source. The power source, where present, is one or more of a DC battery, solar battery, or other source of power sufficient for powering the light **112**. In the case of an external power source, a cord to from electrical outlet or other power supply connects to the implement **100** and the implement includes other electrical components for utilizing such power supply.

[0038] In operation, a human user handles the implement **100** to perform cleaning by directing the element **108** of the head **102** at or across a surface for cleaning, for example, by gripping the extension **110** and moving the implement **100** to cause the element **108** to pass on the surface (e.g., a floor, wall, etc.) to be cleaned. The light **112** of the implement **100** is selectively switched "on" to illuminate and "off" not to illuminate, by the switch **114**. The light **112** is, for example, switched on by the switch **114** when cleaning is performed in a location of low light. The light **112**, when switched on, illuminates an area including a portion of the surface being cleaned via the implement **100**.

[0039] Referring to **FIG. 2A**, an implement **200**, similar to that of **FIG. 1**, also includes a second light **102***b* connected to and incorporated in the implement **100** on another side of the implement **100**. For example, a broom or mop typically has two or more cleaning approaches that allow back-and-forth (or other directional) swiping movements in cleaning operations. The second light **112***b* provides illumination of an oppositely (or other directionally) disposed area of the portion of the surface being cleaned. Thus, the implement **200**, including the light **112***b* and the light **112**, illuminates areas of the surface to be cleaned on each side of the implement **200**.

[0040] Referring to **FIG. 2B**, in conjunction with **FIGS. 1 and 2**A, a circuit **250** (such as the powered circuit **120** of **FIGS. 1 and 2**A) for powering the light **112** of the implement **100**, and the light **112** and light **112***b* of the implement **200**, is disposed within the implement **100**, **200**, respectively. The circuit **250** comprises the switch **114** electrically connected to the light **112** of the implement **100** of **FIG. 1**. The switch **252** is also electrically connected, either in parallel or series as appropriate, to any other light, such as each of the lights **112** and **112***b* of the implement **200** of **FIG. 2A**. The light **112** (or lights **112**, **112***b*, where more than one) is electrically connected to a power source **254**, for example, the battery **122** of **FIGS. 1 and 2**A. The power source **254** is retained within the extension **110** or shroud **106** of the implement **100**, **200**, or is otherwise connected thereto. As previously described, the power source **254** is the battery **122** or other DC source.

[0041] Alternately, an AC power source can provide power to the light(s); however, additional appropriate electrical components (for example, appropriate ground, transformer, etc.) are included in the implement **100**, **200** or external thereto. In other embodiments, the power source **254** is a rechargeable power source, such as a rechargeable battery; and suitable electrical components, such as an electrical cord connector and a recharging unit, are incorporated with and connected to the implement (or are available external to the implement and are connectable thereto), as desired for the design.

[0042] Referring to **FIG. 3**, an implement **300** includes more than one light **312** (e.g., three lights shown as example in **FIG. 3**) on a side of the implement **300**. The implement **300** is substantially like the implements **100**, **200** of **FIGS. 1 and 2**A,B; however, the powered circuit (not shown in detail) connects the more than one light **312** and the switch **114** powers on and off all or certain of the lights. The more than one light **312** are directed as desired to illuminate a surface to be cleaned.

[0043] Referring to **FIG. 4**, an implement **400**, for example, an opposing side of a device like that of **FIG. 1**, also includes more than one light **312***b* (e.g., three lights shown as example in **FIG. 3**) on another side of the implement **400**. The powered circuit (not shown in detail) connects the more than one light **312** and the more than one light **312***b* on the opposing side of the implement **400**, and the switch **114** powers on and off all or certain of the lights. The more than one light **312***b* are also directed as desired to illuminate a surface to be cleaned, such as is applicable for back-and-forth cleaning movements. Although a two-position switch is described as the switch **114** in connection with implements of certain Figures herein, in the case of implements with more than one light, it is to be understood that the switch could include multiple alternatives of "on" and "off" as to lights on a side or sides of the implements and/or as to specific lights of the implements. Those skilled in the art will know and understand that the powered circuit, as well as the power supply and features of the circuit, must be configured and arranged and include appropriate components for each desired configuration and operation.

[0044] Referring to **FIG. 5**, another implement **500** also includes an extension **510** connected to a shroud **506**. The shroud **506** connects to a cleaning element **508**, such as broom bristles. The extension **510** includes a connected switch **514** and the shroud includes a connected light **512**. The switch **514** operates the light **512**, via a circuit (not shown in detail) and power source of the circuit (not shown in detail).

[0045] Referring to **FIG. 6**, an implement **600**, similar to the implement of **FIG. 5** but with multiple lights **612** in the shroud **606**, provides additional light sources for illumination. The implements **500** (of **FIG. 5**) and **600** are exemplary of a pushable-pullable cleaning device.

[0046] Referring to **FIG. 7**, an implement **700** includes an extension **710** connected to a shroud **706**, retaining protruding cleaning elements **708**. The shroud **706** is formed to accommodate and retain a light **712**. The extension **710** includes an incorporated power switch **714**, for example, near a location of the extension **710** close to the connection of the extension **710** to the shroud **706**. The light **712** electrically connects to the switch **714** and a power source (not shown in detail).

[0047] Referring to **FIG. 8**, another implement **800**, for example, a pushable-pullable type device, includes an extension **810** connected to a shroud **806**. The shroud **806** is connected to and retains a cleaning element **808**. The shroud **806** retains more than one light **812**, each positioned to illuminate a surface for cleaning. A power switch **814** is incorporated in and connected to the extension **810** near the shroud **806**. The more than one light **812** are electrically connected to the switch **814** and a power source (not shown in detail).

[0048] Referring to **FIG. 9**, a different implement **900**, for example, a mop, has a handle extension **910** connected to a head **908**, such as strings or yarn, via a connector **906**. The handle extension **910** is connected to and incorporated with a power switch **914** and a light **912**. The power switch **914** is disposed in an ergonomically suitable location along the handle extension **910** for a user's manual operation. The light **912** is located along the handle extension **910** at a location thereof suitable for the light **912** to illuminate an area for cleaning. The light **912** is electrically connected to the switch **914** and a power source (not shown in detail) in order to complete an on/off circuit for operating the light **912**.

[0049] Referring to **FIG. 10**, in conjunction with **FIG. 9**, another side of an implement **1000**, such as the implement **900** of **FIG. 9**, also includes an additional light **1012** (although two lights **912**, **1012** are shown in the implement, multiple lights, beyond two lights, can be included in the implement **1000**, with appropriate or desired positioning along the handle extension **910** in order to direct light to a desired area or surface for cleaning). A power circuit,

including the switch **914**, a power source (not shown in detail), and the light **1012** (and other lights, e.g., light **912**, etc.), interconnects these elements for desired on/off operations of the light(s).

[**0050**] Referring to **FIG. 11**, another cleaning implement **1100**, such as a Swiffer™, scraper, painter, or other cleaning element and surface, also includes a light **1112** (or lights, as the case may be). As with the implements previously described, the implement **1100** includes a handle **1110** connected to a cleaning head **1106** and cleaning fixture **1108**. The implement **1100** also can, but need not necessarily, include a reservoir **1105**, connected to the handle **1110** or otherwise to connect to the fixture **1108** and supply a cleaning substance, for example, soap, paint, or other solid, liquid or gas substance. The light **1112** is incorporated and fixed in the handle **1110** (or, alternatively, at another location of the implement **1100**) suitable to illuminate a surface subject to cleaning, painting or other utility operations. Although a single one of the light **1112** is shown, multiple lights and similar orientation are included. Also as with the implements previously described, the switch **1114** electrically connects to the light **1112** and a power source (not shown), and the light **1112** is desirably switchable on and off via the switch **1114** for use of the implement **1100**.

[**0051**] Referring to **FIGS. 12A and 12B**, an alternative implement **1200** includes a trigger switch **1214** (shown in phantom). This switch **1214** turns "on" whenever a pressure or manipulation occurs to a cleaning element **1208**. The implement **1200** has a handle **120**, connected to a shroud **1206**, and the shroud **1206** retains connected thereto the cleaning element **1208**. Retained in and connected to the shroud **1206** is a light **1212** (i.e., a single light or more than one light, as applicable and desired). A trigger feature **1214***a* of the switch **1214** touches or is otherwise associatedly related or configured to operate "on" whenever the cleaning element **1208** is employed in cleaning operations. For example, when the implement **1200** is not in use for cleaning, the light **1212** is "off" because the cleaning element **1208** is not in contact with a cleaning surface as in **FIG. 12A**; however, whenever the cleaning element **1208** contacts the cleaning surface, as in **FIG. 12B**, the switch **1214** is switched "on" and the light **1212** illuminates. The switch **1214** is any of a wide variety of switch possibilities, wherein a pressure, force, movement, or other event (e.g., downward push in the direction of arrow A) as to the cleaning element **1208** causes the switch **1214** to be triggered and turned "on". As in the prior descriptions of the various other implements and embodiments, the switch **1214** is connected to the light **1212** and each is electrically connected to a power source **1222** by a circuit **1220**. The power source **1222** can be a battery or other source, either internal or external to the implement **1200**. An access cap **1218** permits access to the power source **1222** and/or other internals of the implement **1200** as configured and desired for the particular use application.

[**0052**] Referring to **FIG. 13**, a system for detailing and cleaning includes a housing **1300**, with bristles **1304** and a light **1306** at an end **1308** of the housing **1300**. The housing **1300** is, for example, generally pen-shaped, having a length on the order of that of a writing pen and having a girth that can be slightly larger than that of a writing pen. The housing **1300** can have a shape, such as a narrower end opposite the end **1308**, or other design as desired. The end **1308** can, likewise, have a shape, such as an angled planar design or other desired configuration.

[**0053**] The bristles **1304** are retained at and, in certain configurations, within an indentation (not shown in detail) of, the end **1308**. The light **1306** is also retained at or within an opening of the end **1308**. The light **1306** is lodged at the end **1308** in a manner to illuminate a surface on which the bristles **1304** are swept during cleaning or the like. Although not detailed in the Figure, the bristles **1304** can be retractable from the open/in-use position (as shown in the Figure). For example, a tab **1312** that slides along a slit (not shown) of the housing **1302** in the directions of arrow "A" can allow for selective retraction and extension of the bristle surfaces in order to provide desired bristle **1304** access for use, storage and the like.

[**0054**] In certain arrangements, the housing **1302** is formed of an ABS plastic and a PVC or elastomeric santoprene portion is melded with the plastic as a grip. Of course, any other similar somewhat rigid materials, such as wood, steel, other plastic or synthetic, is suitable. Moreover, the grip portion need not be of a different material or configuration than all other portions of the housing **1302**, and/or the housing can be differently shaped or provided with other and alternative features. The bristles **1304** are any type of materials that perform sweeping, cleaning, application or other desired uses, and can be of suitable configuration and makeup for such uses. The bristles **1304** are retained at the end **1308** by glue, retention mechanism, gripping, or any other desired attachment. The light **1306** is, for example, a low-power bulb, such as an LED or the like.

[**0055**] Although not shown in detail in **FIG. 13**, the housing **1302** contains a power source, such as a battery sufficient to power the light **1306**, and a circuit that includes a switch. The switch permits on/off of the circuit and power to the light **1306**, as selectively desired by a user of the system **1300**. In the Figure, the housing **1302**, at the portion that is elastomeric, covers the switch at the location indicated as **1310** (hereinafter referred to as the "switch", but to be understood as showing in the Figure a possible design for enabling access to the switch by the user). Alternately, the switch **1310** can be located along another area of the housing **1302**, and can be otherwise designed, including, for example, the switch **1310** could protrude through an opening of the housing or otherwise accessible to the user. The housing **1302** is formed as a fixed enclosure, such that the system **1300** can be disposed of once power is exhausted, or can include pieces and opening options to access the inside of the enclosure to replace a power source, light, bristles, or other maintenance or application.

[**0056**] In operation, the system **1300** is retained in a user's hand (or otherwise manipulated). The bristles **1304** are extended by means of sliding the tab **1312** towards the end **1308** along the slit of the housing **1302**, as illustrated in extended position in **FIG. 13**. If lighting of an area for brushing by the bristles **1304** is desired, the use presses the switch **1310** and turns "on" the light **1306**. By again pressing the switch **1310**, the light **1306** is turned "off" to illuminate a surface at the working surface of the bristles **1304**. When brushing is completed, the user slides the tab **1312** along the slit of the housing **1302** away from the end **1308**, thereby retracting the bristles **1304** into the housing **1302** for shield-

ing of the bristles **1304** during non-use. Of course, the system **1300** can also serve as a lighting source, by turning "on" and "off" the light **1306** via the switch **1310**, whether or not the bristles **1304** are extended or retracted or used or not.

[**0057**] Referring to **FIG. 14A**, another system **1400** for detailing and cleaning includes a outer case **1402**, bristles **1404**, and a light **1406**. The outer case **1402** has two parallel sides **1402***b* joined by an end **1402***a*. The parallel sides **1402***b* are each generally semicircular opposite the end **1402***a*. Pivotally attached between the parallel sides **1402***b* is a wheel **1410**. The wheel **1410** retains the bristles **1404**, for example, in a detention of or otherwise affixed to the circumferential periphery of the wheel **1410**. The bristles **1404** extend from and along the circumferential periphery of the wheel **1410** by a measure less than a width of the parallel sides **1402***b*. As will be described, the bristles can be retained internally between the parallel sides **1402***b*, when the system **1400** and/or bristles are not being used for detailing, cleaning, application or similar service.

[**0058**] Also inset along the circumferential periphery of the wheel **1410** is a light **1406**. The light **1306**, or a transparent/translucent screen for the light **1306**, can form a portion of the wheel **1410** or otherwise to continue the generally round, circumferential shape of the wheel **1410**. The wheel **1410** is pivotal, in the directions of arrow "B", either to expose the bristles **1404** and light **1306** from between the parallel sides **1402***b* (such as when the system **1400** is in use) or to rotate the wheel **1410** such that the bristles **1404** and light **1406** are generally maintained between the parallel sides **1402***b* (such as when the system **1400** is not in use).

[**0059**] **FIG. 14B** shows the wheel **1410** rotated such that the bristles **1404** and the light **1406** are retained between the parallel sides **1402***b*.

[**0060**] In **FIG. 14A**, in conjunction with **FIG. 14B**, the bristles **1404** and the light **1306** are rotated via the wheel **1410**, such that the bristles **1404** extend outwardly and the light **1406** is exposingly positioned for illuminating a working surface for brushing or the like by the bristles **1404**. An "on" switch (shown generally in phantom) at about the point **1414** is internal to the system **1400** but is operable by pressing at the point **1414** against the side **1402**. This activates the light **1406** to "on" when the wheel **1410** is so rotated to this position of the Figure and the point **1410** is pressed. The light **1406** thereby illuminates a surface on which the bristles **1404** are swept during cleaning or the like. A rotation tab **1412** is positioned at the periphery of the wheel **1410** to apply a rotational movement to the wheel **1410**, via a user pushing the tab to rotate the wheel **1410**. By rotating the wheel **1410** to the position of **FIG. 14A** the bristles **1404** are extended for use of the system **1400**. If illumination is desired, the light **1406** can be turned "on" via the point **1414**.

[**0061**] In **FIG. 14B**, the wheel **1410** is shown rotated for shielding of the bristles **1404** and the light **1406** when the system **1400** is not in use for brushing or lighting.

[**0062**] In certain arrangements, the housing **1402** and the wheel **1410** are formed of an ABS plastic or other similar somewhat rigid materials. At least one of the parallel sides **1402**, at a centralized portion of the side, can be formed with a somewhat elastomeric or otherwise flexible material to permit activation of the light **1406** by pressing at the portion. At another location along the portion, another similar point **1416** of the elastomeric or flexible material in the side **1402** provides an "off" switch (hereinafter the point **1414** and the point **1416** are sometimes referred to as the "on" switch and the "off" switch, respectively, but should be understood as being the points **1414**, **1416** and the accessibility for powering the light **1406** by the user). The bristles **1404** are any type of materials useful for sweeping, cleaning, application or similar operations with the system **1400**. The bristles **1404** and the light **1406** are retained with the wheel **1410** in appropriate and desired manner, such as by glue, retention mechanism, gripping, or other desired attachment. The light **1306** is, for example, a low-power bulb, such as an LED or other. If a screen is employed to shield the light **1306**, the screen is attached with the wheel **1410** as desired, either fixed or detachable.

[**0063**] Although not shown in detail in **FIG. 14A**, the wheel **1410** contains a power source, such as a battery sufficient to power the light **1406**, and a circuit connects the light **1406** the power supply and each of the switches **1414**, **1416**. The switches **1414**, **1416** permit on/off of the circuit and power to the light **1406**, as selectively desired by a user of the system **1400**. The switches **1414**, **1416** can alternately be located along another area of the side **1402***b*, on the wheel **1410** or otherwise, and a single switch can serve to provide both "on" and "off" activation if desired in the design and application. The system **1400** can be disposable once power is exhausted, or otherwise features of the system **1400** can be formed to permit replacement of parts, including, among other things, the power source, the light **1406**, and the bristles **1404**.

[**0064**] The wheel **1410** can also contain a spring mechanism (not shown in detail), connecting the housing **1402** and the wheel **1410**. The spring mechanism facilitates rotation of the wheel **1410** for thereby extending and/or retracting the bristles **1410** with respect to the housing **1402**.

[**0065**] In operation, a user handles (or otherwise manipulates) the system **1400** to push the tab **1413**, rotating the wheel **1410**, to expose the bristles **1404** from between the parallel sides **1402** (as positioned in **FIG. 14A**). The user can press the respective points **1414**, **1416** to turn "on" or "off" the light **1406**. When the bristles **1404** are not in use, the user rotates the wheel **1410**, via the tab **1413** such that the bristles **1404** are between the parallel sides **1402** and not extended therefrom (as positioned in **FIG. 14B**).

[**0066**] Other alternatives are possible in keeping with the foregoing and all such alternatives are included herein. For example, different and varied shapes, sizes, materials, housings, configurations, pivotal elements, extension and retraction mechanisms, lighting and lights, power sources, circuitry, switches, and so forth, as well as other features such as a handle or extension of an implement can be included or provided. In the case of certain embodiments, a shroud or other connector for the cleaning element can, itself, serve as a handle. The shroud can be any of a wide variety of mechanisms that serve to retain a cleaning element. The shroud can be formed with the cleaning element, such that the shroud and cleaning element are a unitary piece. A wide variety of materials are possible for the implements. Additionally, a wide variety of lights and similar illumination

elements are possible and all are included. External and internal power sources and supplies are incorporable. Replaceable elements, including lights, cleaning element, handle, battery, circuitry, switch or trigger, and other parts and units can be included. Moreover, the particular aspects of switch operations, including the design and method, means or mode of operations thereof, are variable and include all possibilities for every included application and use.

[0067] In the foregoing specification, the invention has been described with reference to specific embodiments. However, one of ordinary skill in the art appreciates that various modifications and changes can be made without departing from the scope of the present invention as set forth in the claims below. Accordingly, the specification and figures are to be regarded in an illustrative rather than a restrictive sense, and all such modifications are intended to be included within the scope of the present invention.

[0068] Benefits, other advantages, and solutions to problems have been described above with regard to specific embodiments. However, the benefits, advantages, solutions to problems and any element(s) that may cause any benefit, advantage, or solution to occur or become more pronounced are not to be construed as a critical, required, or essential feature or element of any or all the claims. As used herein, the terms "comprises, "comprising," or any other variation thereof, are intended to cover a non-exclusive inclusion, such that a process, method, article, or apparatus that comprises a list of elements does not include only those elements but may include other elements not expressly listed or inherent to such process, method, article, or apparatus.

What is Claimed is:

1. A system for brushing, comprising:

a bristle;

a housing containing the bristle, the housing being hand holdable; and

a light connected to the housing.

2. The system of claim 1, wherein the cleaning element is selected from the group consisting of: broom, mop, duster, cloth, bristle, painter, roller, detailer, applicator, and combination.

3. The system of claim 1, further comprising a plurality of lights.

4. The system of claim 1, further comprising a switch connected to the light for turning the light on and off.

5. The system of claim 5, wherein the switch is selected from the group consisting of: a two-position switch, separate "on" switch and an "off" switch, and combinations.

6. The system of claim 3, further comprising a switch positional in more than two positions for selectively turning on and off select ones of the plurality of lights.

7. The system of claim 1, further comprising:

a power source, electrically connected to the light.

8. The system of claim 7, wherein the power source is connected to and retained internally within the system.

9. A hand implement for work on a surface, comprising:

an elongate housing having an operational end;

a work element connected to the operational end;

a light connected to the housing for selectively illuminating the surface;

a power source contained within the housing and connected to the light; and

a switch connected to the power source for turning on and off the power source to the light.

10. A hand implement for work on a surface, comprising:

parallel sides joined by an end;

a wheel rotatably connected between the parallel sides;

a work element connected to the periphery of the wheel;

a light connected to the wheel for selectively illuminating the surface;

a power source connected to the light and contained within the wheel; and

a switch connected to the power source for turning on and off the power source to the light.

11. The implement of claim 10, wherein, via counter rotations of the wheel, either the work element is extendable from between the parallel sides to expose the work element for work on the surface or the work element is retainable between the parallel sides to shield the work element when not in use for work on the surface.

12. The implement of claim 11, wherein the switch is externally accessible on at least one of the parallel sides.

13. A method of using a hand implement, comprising the steps of:

connecting a light to a housing;

connecting a bristle to the housing; and

selectively switching on/off the light.

14. The method of claim 13, further comprising the step of selectively extending the bristle from within the housing for use of the implement.

15. The method of claim 13, further comprising the step of selectively illuminating a work surface.

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